εοthen

STUDI DI STORIA
E DI FILOLOGIA ANATOLICA
DEDICATI A
GIOVANNI PUGLIESE CARRATELLI

a cura di Fiorella Imparati
A Luwian Heart

1. Recent work has increased the number of Luwian (i.e. Cun. Luwian. Hieroglyphic Luwian and Lycian) words to which correct meanings and, in some instances, etymologies can be assigned. Here we discuss a word which is attested both in Cun. and Hier. Luwian and, if our interpretation is correct, can be assigned a precise meaning and etymology. We are glad to dedicate this Anatolian «heart» to Giovanni Pugliese Carratelli who has been a life-long teacher and friend for one of us, has fostered Anatolian studies in Italy with both warmth and learning — and has shown with his life work that historical, philological and linguistic studies cannot, and should not, be disjointed.

2. Massimo Poetto (KZ 95, 1981, 274 ff.) has compared the newly found Hieroglyphic Luwian word za + rab-za (KULULU 5, 7 § 12) with the Cuneiform Luwian IZI₂₂₂-z₂₃₂₂₄ of KUB XXXII 7, 12': apart from the formal similarity of the two words, the correspondence is supported by the UZU determinative. In KULULU 5, 7 § 12, which is part of a curse, the gods are exhorted to eat the za + rab-za of the evil doer!

---

1 We transcribe Hieroglyphic Luwian according to the system first discussed in J.D. Hawkins, A. Morpurgo Davies, G. Neumann, Hittite Hieroglyphs and Luwian: new evidence for the connection, «Nachrichten der Akademie der Wissenschaften in Göttingen, Phil.-Hist. Klasse» Nr. 6 (1973) 155-157 [HHHL]; see also J.D. Hawkins, An. St. 25 (1975) 119 ff., especially 133-155, tables 1 and 2. The text of KULULU 5 was communicated by Professor Mustafa Kalaç to the XXVII R.A.F. in Paris, July 1980 (see «Hittitica» 20 (1980) 25); cf. new Kalaç, «Anatolica Araptanlar» 10 (1986) 159 ff. He numbers it KULULU 13. Hawkins in his forthcoming Corpus renumbers the KULULU stone inscriptions to separate them from both the lead strips and the largely illegible fragments. The following numeration is employed: KULULU 3 (stèle = Mersiggi, Kula 9); KULULU 4 (stèle = Kale, Kula 12 «Anadolu Araştırmalar» 9 (1983) 269 ff.); KULULU 5 (stèle = Kale, Kula 113).
The word must refer to a part of the body, as the paralle...its formative for "feet" fits with this interpretation, even if the Cuneiform text is too broken to offer any other information. Poetto also identified a fragmentary form of the same word in an even more broken Luwian text (KUB XXXV 72 7", here quoted according to Starke, StBoT 30, 396):

3' nu INIG.G.G[R]G
      gi-im-ri [1]  
      nu GEŠTIN fi-pa-an-
6' za-a-bi-du [1]  
      pa-a za-ar[za(-)]  
      ik-ku-ša-a[še]  
      za-a-pa-at [ta]
      ni-b[ ]

On the strength of the logogram INIG.G.G[R]G found in the Hittite part of the fragment Poetto tentatively concluded that Luwian zarza meant "liver". Yet, this last point is not proved by the text: zarza need not correspond to one of the words in the Hittite sentences and, if it does, there is no proof that it corresponds to one of the preserved words. On the other hand further evidence may suggest another interpretation.

3. While the evidence for Cuneiform Luwian remains desperately fragmentary and cannot be used beyond what has been stated, forms which can be connected with zarza appear in other Hittite texts. Before discussing them we must clarify a point of grammar. In KULU LU 5 za + rashza must be an accusative: this implies that it is either an accusative neuter plural ending in -a and built on a stem ZAR- or - more likely - an accusative neuter singular ZAR-marked by the -sa/za element which characterizes these forms in Cun. and Hier. Luwian². Admittedly in Cun. Luwian -za normally occurs after -l and -r, while -sa is found after vowel and -r, but at this stage we should not exclude the possibility of a permutation -sa/za, particularly after -r. Hier. Luwian has, to our knowledge, only one piece of evidence for an *rstem neuter, (BESTIA)REL-za + rashza (ALEPPO 2, 2 § 5;


cf. Studioi Meriggi, 400) with a final -za and not -za. We shall return to the problem later, but let us point out now that from a neuter stem zar- we may expect indirect cases built on zar or built on a root which ended in a stop such as e.g. zar-

In Hier. Luwian the following texts are relevant to our problem:

(2) ALEPPO 3, 1 §§ 1-2
...lu + x[ri]ša-na DOMINUS-rša (VAS)za + rash-riša | sa-ta wa-riša [SUB]u-na [aa....

<.... to prosper (? ) was of the lord's ZARTI- and under (?) lam ...' »

(3) KÖRKÜN, 4 § 10
š-aš-sa | FEMINA-tq-ti-sa | na-na-si-sa BONUS-mi-sa X
za + rash-riša-na INFANS-nina-pa-ša

<... My wife (?) Nanasis, the dear one, gave a child of the ZART- » (He who takes this vine away from her, Nanasis, the child, the grandchild, the great grandchild ...?)

(4) KARABURUN, 3 §§ 11-12
za-lu-ša-an-sha REL-za-sa-ma-ša REL-sa ARHA < MALLEUS >-ša
š-aš-sa-rex ha + rash-riša-sha-ša (DEUS)LUNA MI-sa
ki-bar-tu-ni za + rash-riša INFRA(ša)-ša

<... He who shall erase these engravings, to that king may the Moon God of Harran go down (?) on the KI HARANI, the ZART- »

KI HARANI and ZARTI are in the dative singular; they are probably both nouns in a standalone, but KI HARANI could also be an adjectival agreeing with ZARTI.

4. The passages quoted document a stem zar-, which yields the


⁴ Cf. Kalice, "Stateuntum" 47 (1969) 362, 157, Tav. IV, VI, VII; Meriggi, Monnale II/2 (1973) 99 f., Tav. XVI. The readings here follow Hawkins. The sign before za + rash-riša is of unclear form, certainly not šg (to Meriggi) but just as rendered by Kalice, loc. cit. For the second clause see Monnure Davies and Hawkins, Studia Meriggi, 355 f.

⁵ Cf. Meriggi, Monnale II/1 (1967) 105 f., Tav. IX. Text and readings here follow Hawkins.
expected dative singular zart-ı and genitive adjective zart-ası, but also an "abnormal" genitive singular zart-yası instead of the expected zart-ı.

The logogram VAS⁶, may point to a part of the body — a meaning which also fits with the curse of KARABURUN in (4) above, and which speaks for the identification of the form yarç discussed above and our zart-stem. But what is the word we are discussing? In Anatolian terms there is only one stem whose inflection is directly comparable to ours.

The Hittite neuter ker (ki-ir) "heart" has a dative kardi, a directive kardas, a (rare) genitive kardas, but also an "abnormal" genitive kardıyas. Does a meaning comparable to that of our word fit our texts?

With (2) above we may compare "To be/make of the heart," i.e. "to be/make (do) what one likes" (e.g. LUGAL-ša...kar-di-ša-ša-ša [k-ši-ši], HAB II 53), a well known Hittite phrase which matches Akkadian expressions like ALLELIMLI-uriya li īqim (EA 29: 154) "may my brother do (that) of his heart" (i.e. "what he likes").

In (3) "child of the heart" i.e. "child of one’s body" matches well attested Hittite phrases, see KBo III 34, iii 17: kar-di-ša-ša-si-ša DUMÜMEŠ, cf. KUB XIV 1 obv. 80 (Madd.); VbToT 58 13 (cf. Sommer HAB, 94 f.) Finally the passage of (4) can be compared with (1) from where we started. In the standard curses the god attacks parts of the body with well known ferocity.

In general it seems that the meaning "heart," which we have reached on the basis of morphological arguments, fits all the contexts in which ZART(1)- occurs; for za + raf-ıza of KULULU 3 the same meaning had already been suggested by Kalçaş (ap. Poceto, loc. cit., 276, n. 13) presumably on the basis of the context. Obviously the phonological and morphological problems caused by the equivalence we have set up between ker and Luvian zurca have not yet been solved.

---

6 Besides za + raf-ı-ıasa and the verb za + raf-ı-ı: (see Hawkins, An.St. 30 (1980) 159 the use of the VAS determinative: (1) arpa, "form, figure, image"; (2) VAS-ı, closely parallel to (1), "person, self", cf. below, citation 7 ii and KULULU 4 § 9 (see a forthcoming contribution by Hawkins); (3) antasama, "wisdom"; (4) tawa, "eye" (7) (see Hawkins, "Kadmos" 1980, 135 f., where the comparison with UZU is suggested); (5) arba pa + raf-ı-ı, verb (ASSUR letters a, 2 § 4; e, 2 § 5; e, 2 § 12), sense conjecturally "ask, require" (Hawkins and Morpurgo Davies, EZ 94 (1980) 101 f., 115 f.); (6) nasi, adjective (ASSUR letter e, 2 § 10); (7) nasi, noun, and (8) la + raf-ı-ı-ı-is, noun (ASSUR letter e 1 § 4).

7 For some of the forms attested cf. Tischler HEG s.v. ker with further references; for the doubtful endingless locative kir E. Neu, Studien zum endunglosen "Lo- kativ" des Heth., Innsbruck 1980, 31-33; for Middle Hittite nom. ki-er, ker, H. Craig Melchert, Studies in Hittite historical Phonology, Göttingen 1984, 129. The origin of the inflection and especially of the genitive kardıya, which is an innovation, is discussed by Szemerényi, in Denmark Balticum, F. Sjögren, Stockholm 1970, 217 ff.

However, before we turn to them it is useful to consider a few other texts.

5. - One and possibly two verbs may be related to our stem. The best attested forms are those of the verb za + raf-ı-ı: which may be preceded, like the zart- stem, by the logogram VAS.

(3) KARABURUN, 1-3 §§ 7-10

(i) si-pi-sa-pa-waʃi REX-sa | REL-ti si-pi-ka ni-ia-sa-na MALUS-za CUM-ni za + raf-ı-ıti i ni-mu-waʃi-ı ni-pa-waʃi ba-ma-si

(ii) si-pa-pa-waʃi-ta REX ti harai-na-waʃi-sa (URBS)

(DEUS)ku-AVIS-i sa-ma-pi ta-awši PES-si-ıa INFRA ı-a-sa-tu

(iii) si-pi-sa-pa-waʃi ni-ia-sa REL-ti si-pi-ka REX-ti MALUS-za

CUM-ni za + raf-ı-ıti i ni-mu-waʃi-ı ni-pa-waʃi ba-ma-si

(iv) si-pa-sa-pa-waʃi-ta ni-ia-sa-na harai-na-waʃi-sa (URBS)

(DEUS)ku + AVIS-i sa-ma-pi ta-awši INFRA-ta ı-a-sa-tu

"But if Sipis the King ZARTI's evil for Sipis Nis' son, for (his) son or grandson,

for Sipis the King may the Haraane (god) together with (?) Kubaba swallow down the eyes and feet.

But if Sipis Nis' son ZARTTI's evil for Sipis the King, for (his) son or grandson,

for Sipis Nis' son may the Haraane (god) together with (?) Kubaba swallow down the eyes"⁸.

(6) TELL AHMAR 1, 5-6 §§ 18-20

(i) [ARHA]- [pa-waʃi]-tı | REL-ti ("MORI")-waʃi-la-tı

(ii) waʃi-mu-ı - pa-si-ı ' | (INFANS)mı-mu-waʃi-sa-ta MALUS-ta-waʃi-z[a] | CUM-ni ["æ382"]LEPLUS + RA/I-ia-ta

(iii) mi-ı-ba-waʃi ' ("274")-wa-pa-ti-ı | ("MALUS")-ba-ba-ni-waʃi-

z[a-ı'] | CUM-ni | ["VAV[+]"z[a] + raf-ı-ı-ta-

"But when he died,

his son decreed evil for me,

and ZARTTEd wickedness for my demesne."⁹.


(7) TELL AHMAR 2, 6-7 §§ 12-14
(i) é-ma-sa-pa-waʃi-ta’ | ʃ-a-sa, ma-za | REL-sa ARHA [s MALLEUS *šTI-ba-i] [8]
(ii) [NEG,] ʃ-pa-waʃi mi-t-i’ [VAS-mi] [REL-sa MALUS-waʃi-za’] CUM2-mi [(VAS?)] za + nasi-ti-i’
(iii) NEG, ʃ-pa-waʃi mi-INFANS-mi-i’ ...
   « But the one who shall erase my name,
   or who shall ZARTI wickedness against my person
   or my son ... »

(8) SULTANHAN base, § 46
[za-pa-waʃi] [a + nasi-ma-za | REL-sa’] [za + nasi-ti-i’]
   « He who ZARTI’s this ARAMA ... »

The sentence is the beginning of a curse and describes an action done by the evil doer; what follows is difficult and partly broken but the final extant clause refers to the penalty.

Clearly we have sufficient evidence to identify a verb ZARTI,10 which contextually must be given a value such as « wish, propose, contrive » in quotations (3), (6), and (7). In quotation (8) the meaning of the substantive ARAMA (acc. sing. neuter) has never been elucidated. If the basic meaning of ZARTI is « to wish », the verb can be interpreted as a *ye-ša* denominative from zart- « heart »; for a semantic parallel one may think of Greek ἀνθυπάτος « desire, wish » built on ἀνάς « soul, spirit ». From a formal point of view the verb zarti- could derive from *zart-ye-ša* or from *zarti-ye-ša*.11

11 The spelling za + nasi-ti-i’ (with final -i) is paralleled by nasi also in SULTANHAN rede, (top line 1).

TELL YAYINAT VII 8 has a form za-pa-nasi in a fragmentary context. It could be the infinitive of our verb if we assume that the suffix -i (< *ye-ša) is deleted before the infinitival -nia (for a parallel cf. perhaps the Luwian glosses le-ša-ni-i-na, 3rd pers. sg. pect., le-ša-pa-nasi, participle, and le-ša-pa-ar-ni-na, infinitive: references in Laroche, DLL a. v. and CIB, a. v.). There is also a form za-sa-nasi (KARKAMIS A 14a, 4 § 3), which could be associated with our root, but it is quite obscure and we cannot be certain that it is a verbal form. In MARAŠ 4, 6 a « VAS » [ša-fi-ša... may well be a form of the verb zarti-]. MARAŠ 3, 4 also appears to have a form of the verb in a context which requires further consideration.

One could even think of a hypothetic built on the loc. kand- Stenčenurj, loc cit (in note 7), 517 derives the Hitt. kantispšeš- « to be angry » from a -ma- abstract built on a verb *kantipše* based on kand-. Differently Laroche, Mélanges Boresteix, Paris 1975, 342 (who claims of a compound), and Oedinger, Sammlung Schreibens des keh, Verh. Nürnberg 1975, 341 n. 167 (*kantipšeš- « Zorn » built on kand-).

6. - The problems raised by the isolated form za + nasi-za-mi-sa are greater. The word occurs only in:

(9) KARKAMIS A 7i, 3 § 14
[za-sa-pa-waʃi] ʃta-waʃi + nasi-za-sa | IDEX-zu-sa
(« *š3s + RA/I ») za + nasi-za-mi-sa | FRONS-bi-ti ʃta-sa, zu-za-sa + nasi-za-sa CAPUT-ti-sa
   « But this (is) Tuwaris, the ZARZA’ed of the ruler, the prince proclamed for preeminence ».

Presumably the words refer to the baby who is shown in the text as being carried by a woman (cf. Hawkins, An. St. 29 (1975) 159), and who may well be the son of Jariiris, the ruler. That ZARZAMIS is a participle seems obvious in view of the -mi suffix and the parallelism with anaarzasi, a meaning such as « beloved », « favourite », etc., would suit the context and would favour a connection with the word for « heart ». Alternatively, we could think of a semantic equivalent of zartasi, i.e. the « embodied (son) of the ruler ». In either case the morphology requires explanation. In zarte the final -sa does not belong to the stem and should not appear in the derivatives of the noun. Tentatively we suggest that we have here the treatment of a reconstructed *zard-sa-mi-sa in which a *dye- cluster yielded -sa. A similar -š does not appear in the stem of the verb zarti- because of the early change of -ye to -i-. In the absence of further evidence the suggestion remains hypothetical but is not implausible. It is unfortunate that the logogram is of no help in identifying the word.

7. - So far the evidence in favour of a connection of Hier. Luw. and Cun. Luw. zarte with Hittite fet-ša « heart » is satisfactory; it is unfortunate that the Cuneiform sequences za-ar-tša-ku-wo-su (KUB XXXV 102 (+) 103 ii 5’) and za-ar-tša-ku-wo-su (KUB XXXV 133 ii 4’) have no context which shows whether they belong (as seems likely) with zarte and with the zarte of Hieroglyphic14. The major problems which remain concern phonology and morphology. In increasing order of difficulty: why - and here we return to a problem mentioned earlier - the neuter nominative-accusative is marked by a -za element though after -r we expect -s? Why do we have an -s vocalism in the nom.-acc. Luw. zarte(-sa) vs. the e/i vocalism of Hittite ak(-i)? Why an initial

14 It is also possible that our root is found as an onomastical element: cf. Laroche, Noms des Hittites, 209 (*extra-i*).
case of «heart», «-r» may be due to the treatment of «-d».

We now turn to the second question. The ablauting vocalism of the Hittite word for «heart» is obviously archaic. The nominative ki-pr presumably represents a lengthened form *kör(d) and the other cases a zero grade *ked > *känd. In Hittite we expect: *i > i (hence *kör(d) > *ki > *zir) and *r > ar (ked > *kär); the nominative has generalized the vocalism of the indirect cases (cf. Latin cer, cordis with a similar development) 17.

7.1 - The most difficult problem concerns the initial «r» of the Luwian word. The development of IE velars in the Luwian languages is far from clear and has been much discussed. Here we must distinguish two different problems. First, we must ask whether it is at all plausible that a Luwian initial «r» corresponds to an Hitt. k- derived from an IE velar: this is the only question which is directly relevant to our identification of zarae. Secondly we may consider what use we should make of the new data.

The first question is easily answered. There is a well known parallel for the correspondence Hitt. k- (<-«r»), Luw. z-, the demonstrative Hitt. ke, ke, ki- «this», Can. Luw. za, zr, Hier. Luw. zar, zir, z- «this».

As an additional example we may tentatively refer to Can. Luw. zi-ar1 / zi-ar which can be compared with Hitt. ki- «lie down» on the assumption that we are dealing with a mediopassive 3rd sing. in -ar1, morphologically similar (synchronically at least) to e.g. Hittite essar, Can. Luw. altri. The Luwian word occurs twice in similar clauses:

KUB XXXV 51 i 31 za-ar1-zi-za-ar NUMUNI.1.A-na pu-ru-nu-tu-1-2 ...
KUB XXXV 54 ii 31 za-ar1-zi-za-ar NUMUNI.1.A-na pu-ru-nu-tu-1-2 in-za-ar1-zi-za-ar1-2 ...

Once it is found in a more broken context (KUB XXXV 68, 8 za-ar1 pu-na-sa zir-ar1-) which is of no great help.

17 In view of the observations above, we may have to reconsider the inflection of the nominative (<-«r») kär-la, «power» with its probable dative *kär-la-re (TELL AHAIRI 1, 4 55 12 and 14; cf. Hawkins, An. St. 30 (1980) 148 f., but it now seems preferable to take the -r form as a dative rather than as an ablative). A neutron in *en-tri-čka-za-ar, Dat. -čka-za-ar is possible, but we cannot exclude a dative *en-tri-čka-za-ar, Dat. -čka-za-ar. The word for «place» nom.-acc. neuter LOCUS-1.A-re, Dat. 1.A-re needs further consideration (beyond Hawkins and Marpurg Davies, JRAS (1975) 130 f.) but here the comparison with Lydian pičai (dat. 1stg) may speak for an -r-formation.

18 A short «r» would normally yield «u» in Luwian, but for «heart» we expect «e» in the nominative. Also, Oettinger has argued that after a velar Luwian changed «e» to «a» (see below). If this is acceptable, even a short form of the nominative could not yield an. For the shift of «i» to «e» cf. HHL 188. The closest example is that of the root in «to sit», for which see also Hawkins and Marpurg Davies, An. St. 28 (1978) 107 and 108-110.
The word za-’a-ti of the first two passages is normally translated as 'voic-
ci’i = ‘here (is)’ or the like; in some texts the subject follows in a
nominal verb-less clause (cf. e.g. KUB XXXV 54 ii 41’). In a sense here
zii-ta-ri) is superfluous; we want to translate 'here are the seeds'.
This speaks for a meaning similar to that of Hitt. *kittir; 'it lies, it
is' which is frequently found in Hittite rituals in similar contexts.
The added bonus of this interpretation is that it provides some support
for the old suggestion by Thomsen and Pedersen that Lydian *tehi is
related to Hitt. kti- (H. Pedersen, Lydiker und Hittitisch, 17 f.). The verb
is normally taken to mean 'rest, lie' (cf. Carruba, Die Sprache 19
(1968) 19 fl.), but problems arise in determining its morphology
and Carruba's attempt to treat it as a first person plural causes syntactic
difficulties in a number of contexts. It is not inconceivable – though
impossible to prove – that *tehi is a fossilized medial passive form used
for all persons and derived from *ti-yi-iti with a Lydian change from
verbal to nominative (Cun., Hier. Luwian z–, Lyc. s–) and a conceivable,
though so far unparalleled, Lydian change from *n– to *n–.
Whatever we conclude about Lydian tiyari and Lydian *tehi in the
present uncertainty about the fate of verbs in Luwian it is clear that the
comparison of Cun. Luw. zarak, Hier. Luw. zarak, zarti and
Hitt. ker/kart cannot be rejected on phonological grounds.\(^{19}\)

7.2 - It remains to be seen how the new correspondence fits within
the data we have already, but this is not the place to reconsider in
detail the whole problem of the verbs in the Luwian languages.\(^{20}\)
Yet a few points of agreement may be summarized.

a) In Cun. Luwian the voiceless labiovelar \^k\ is preserved as such
(kisti < who) at least in initial prepositional position. It is still debated
whether the REL sign of Hier. Luwian (REL kis ‘who’) is to be read
as kusi or kusti. Lydian has \(\langle khi\)is \(\rangle\) for the relative. In Cun.
Luwian, Hier. Luwian and Lydian *ge (presumably together with *gah
is continued by us/uu (*gau) > Hier. Luw. wusu, Lyc. wusu/wusu,

b) In the Luwian languages the voiceless velars \(g\) and \(^{21}\)

\(^{19}\) Tiicher, HEG s.vv. kaisti- and kari = compares these Hittite stems with Cun.
Luw. sarri- and zarri- but the two equivalents are too doubtful to be relied upon.

\(^{20}\) We use the incorrect but conventional term 'velar' to refer to all dental phonemes
attributed to IE: pure velars, palatals etc. The problem of their treatment in
Anatolian has generated a great deal of controversy; cf. the basic data and the references
for earlier literature Langlotz, RSL 55 (1953) 77-79; Irvin, Symbole der Kryptographen,
Wocchn 1956, 131-4; Guarnieri, Studia Palenfr. Roma 1956, vol. 2, 313 fl.; Oettinger,
MESS 34 (1976) 101 fl.; Szemerenyi, Scritti in onore di G. Bordonaro, Brescia 1976,

178

in most positions (though not necessarily in all, if we are to believe
in the connection between Hier. Luw. ta-la-mi and Can. Luw. tim-
mi); Cun. Luw. iha-iti < ‘hand’, Hier. Luw. isiri, Lyc. izi < *ghe-
s, Hier. Luw. taweis < ‘daughter’, Lyc. keuna < *kheina.\(^{21}\)

The greatest uncertainty arises about the treatment of the voiceless
velars, i.e. of \(^\ast\)k and \(^\ast\)g (for those who distinguish between pure and
palatal velars) or \(^\ast\)k (for those who do not). A special problem
is caused by the Hier. Luw. forms for ‘dog’ (si-a-ba-i), ‘horse’ (si-ka-
a+wa+na+), and possibly ‘horns’ (si+tul+mi, with unexplainable u, if
the Indo-European etymology is correct) which show su- (if the transfor-
ation is correct) instead of the expected kau or kau clusters. No new
evidence is available and it seems useless to discuss here the various
interpretations proposed for these forms; borrowings, satem like forms,
instances of palatalization of *k before \(u\) (perhaps fronted?), etc.\(^{22}\)

For the rest the best evidence – some of which was discussed above
– is in initial prepositional position. Roughly three views are possible.
The first – and the most naive – would argue on the strength of forms
like za- ‘this’, zarak ‘heart’ that not all voiceless velars initially
and prepositional turned into \(i\) in Cun. and Hier. Luwian and possibly
into \(s\) in Lydian.

This can be rejected on two grounds. First, there are far too many
words in the two Luwian languages which begin with ka-; a satem
language \(k\) could derive from \(\ast\)ku, but as we have seen this is not the
case in Luwian. Hence a general statement such as the one ventured
above implies that all ka-words are borrowings of one sort or the
other – which defies credibility. Secondly, there are Cun. Luwian
words which begin with ka– or ka– and for which Hittite parallels and an IE
etymology are available: kaši- ‘to cut’ vs. Hitt. kati- (< *kari-?),
kaš- ‘comb’, vs. Hitt. ktiš-kaši; kattauvulfen ‘enemies, rene-
gers’ vs. Hitt. kattuwa (cf. *kot in Greek kópte ‘ill will’) or the
*kaš- root of Gaul. cawu, Olb. cau, OHG hau-, Skt. kā-. It is clear
that a different and more sophisticated approach is necessary.

Both verbally and in an unpublished manuscript written in the '70's
Warren Cowgill suggested – with a great deal of hesitation – that
Luwian showed different treatments for voiceless pure velars and pal-
tal velars; the former would have been preserved as such in initial posi-

\(^{21}\) Cf. Irvin, op. cit., in note 20, Oettinger, op. cit., ibid.

\(^{22}\) Cf. Szemerenyi, op. cit., in note 15, with the earlier bibliography. It is impor-
tant to notice, a) that both in Cuneiform and in Hieroglyphic Luwian there are a very
large number of words which begin with \(k\) before consonants, and, b) that we now
have at least one word *kunni- ‘pure, holy’ – which is attestated in this form in
Cun. Luwian, Hier. Luwian and Lydian.

179
tion (karš, kita) but conceivably changed to -b internally (lab-, if connected with *lekum < light>); the latter would have yielded z or s both initially and medially (za- this and the Hier. Luwian instances of su- < leuweis> ). The words discussed above would fit into this schema since both *kerem - heart and *kebis < lie> had palatal velars. Yet the suggestion does not answer the objection raised above, the number of pure velars traditionally attributed to IE is very limited. Should we assume that all attested instances of Cun. and Hier. Luwian k- are found in borrowings or in words which had a pure velar? Moreover, the Luwian origin of kita- is not altogether clear (see below) and the etymology of Anatolian *kata- < assertion reconstructed on the basis of Hitt. kattawar, etc. may speak against the theory. If the connection is really with Greek xτις, as suggested by Laroche, RIA XXIII/76 (1965) 71, no problem arises (both a palatal and a pure velar yield Gr. κις), but Melchert (KZ 93 (1979) 268 ff.) has made a good case for a *kat- root with a different range of cognates26. If the root in question is connected with Skt. lati, as suggested e.g. by Pokorny IEW 534, the velar must have been a palatal one. In other words the theory suffers because of the lack of words which clearly had a pure velar in the stem. At the moment the hypothesis cannot be dismissed but alternative suggestions must also be explored. What follows is an attempt in this direction.

If we leave aside the question of Hier. Luwian sa from *kua or *ku and the few examples of initial z or s from voiceless velars are those discussed above, the question, zara- heart, possibly záyri, Luwian sititi a lies. It is legitimate to wonder whether the treatment of the velar was influenced by a following i-vowel. It is possible that a velar should yield an i-vowel in Luwian (possibly with quantity differences); hence záyri. For the demonstrative za- we have two attested stems in both Cuneiform and Hieroglyphic Luwian: za- and zá-. The za- stem (presumably from *ki-) occurs in the Cun. Luwian noun and acc. plural (zina and zina) and in various derived forms. The Hier. Luwian inflection which builds the noun's acc. plural (za(n))’ on the za-stem of the singular is likely to be less archaic. Here too we could postulate an earlier contrast *ke-, *z- replaced by za-je- with generalized z-. We have discussed the inflection of za heart above. The oldest

26 The discussion in 7.2. was meant as a summary of some (by

27 In cases such as 7.2. the discussion of kua- in Cun. Luwian the evidence still seems that collected by Laroche in DDL and, with the exception of kita-, consists of obscure glosses the Luwian nature of which is not clear, even if the endings are Luwian: ki-ka-ku-suk-ta, ki-ku-ku-ku-ku-ku. In Hier. Luwian we have a few words etymologically and semantically obscure: the verb (IAMMA)síma- < burn sacrifice> and the nouns kiptum- (quoted (2) also found in Hittite), kí-ka-ku-tu (a missing derivation) and a foreign origin will be argued for elsewhere), ki-ka-ku-ku (see above quotation (4), ORIENTS)ki-ka-ku-tu- < west>, (DOMUS)ki-ka-ku-tu- tis. 28 Schizzo grammaticale dellAnatolico, in Memorie Acc. Linnei, Classe di Scienze Morali, XXIV, 1 (1960) 315 ff.
no means all) of the problems one meets in trying to account for the treatment of the IE velars in Luwian. We can retain from what precedes two conclusions. First, we now have sufficient evidence to identify in Cun. and Hier. Luwian a neuter zar- / zart- « heart » which matches Hittite ker / kerd- , and at least one verb zarti- derived from it. This identification supports (and is supported by) the old comparison between Cun. and Hier. Luwian za- / zl- « this » and Hittite ke- / ke- / ke- « this »; perhaps it also opens the way to an interpretation of Cun. Luw. tîyart(-i) and Lyc. sînî as cognates of Hittite kitât(-i). Secondly, we have to acknowledge that we do not fully understand the Luwian treatment of the voiceless velars in word-initial position (we know next to nothing for these sounds in internal position): the two hypotheses examined may shed some light on the problem°. In particular, we ought to keep looking for examples which support or demolish the theory that the change *e > *z- originally occurred only before a front -i- vowel inherited or derived from *ei or *e.

° In a forthcoming article H. Craig Melchert argues with a wealth of data in favour of a version of the first hypothesis which we considered above. It is unfortunate that the manuscript reached us too late to be taken into account in this paper, but we are grateful to the author for showing it to us ahead of publication; we also notice with pleasure that the three of us have independently reached the same interpretation of zarâ and tîyart.